

Innovation Landscapes

Sanna Rimplainen, Laura Rooney and Ciaran Morrison

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Purpose of document	Landscape of organisations in the field of innovation
Other detail (delete row if appropriate)	

Related projects	Funding landscape (DHI141216O0002)
Keywords	Innovation centres; funding; resources; Innovation in health

Organisation/ Initiative name	Description	Relationship to DHI	Notes
Health Innovation Partnership (HIP) between NHS Scotland and Life- sciences Association	<p>set up by the Scottish Government in April 2013 to help NHSScotland to work more closely with the medical technology and other life sciences sectors in order to improve its utilisation of innovative healthcare solutions using modern technologies.</p>		<p>http://www.healthinnovationpartnership.com/131210-factsheet.pdf</p> <ul style="list-style-type: none"> -set up 2013 -Andrew Folie, sr NHS manager – liaison with HIP -Ed Clifton, sr health economist from HIS – to help assess proposals using the Intermediated Medical Technology Overview process developed by the Scottish Health Technologies Group for the purpose. -designed to facilitate 2 way exchange of ideas and requirements between the life sciences industry and the NHS <p>It currently (January 2015) provides effective access for over 50 life sciences companies to NHS clinical expertise and advice about NHS requirements for these companies' ideas and products. They use the HIP to obtain expert views from clinicians on their technology proposals – around 150 clinicians are already partnering with companies through the HIP.</p>

			<p>Although set up between these technologies and digital health and other developments means that in practice the HIP is talking to companies active in the areas of medtech, digital health and medicines.</p> <p>-Company requests for assistance from the HIP are logged using the Health Innovation Assessment Portal (HIAP) run by NHS National Services Scotland's National Procurement Directorate, as well as being tracked systematically by the HIP itself. The Portal can provide companies with initial feedback on their ideas. The HIP also liaises directly with NHS National Procurement Directorate at a company project level to help remove obstacles to procurement and assist companies to enter their home market via NHSScotland.</p> <p>-Runs workshops with companies, clinicians and NHS Boards' Innovation Champions to identify future NHS requirements for innovative technologies and services, and suggests solutions to them.</p>
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Digital health and care partnerships (formerly The Scottish Assisted Living Partnership)			Led by NHS24
Medicines Strategic Engagement Group			Convened by Chief Pharmacist
Health Sciences Scotland (HSS)	a partnership of medical universities and their associated NHS Health Boards in Scotland, was established to promote excellence in the field of clinical		It is creating a world-leading platform for translational medicine research that benefits not only patients, but also delivers economic benefit through the development of partnerships with the pharmaceutical and biotech industry. HSS was the driver behind the Stratified Medicine Scotland Innovation Centre , a collaboration between Scottish universities, the NHS and industry designed to develop translational medicine solutions.

	and translational medicine.		
NHS Health and social care Innovation fund	A funding body aiming to raise millions of pounds to develop original and pioneering treatments for Scotland's patients	Supports innovations within NHS Scotland	http://www.nes.scot.nhs.uk/media/3431891/innovation_in_nhsscotland.pdf#page=6&zoom=auto,-82,160 <p>The fund will enable ideas where there is a proof of concept but not evidence of benefits to NHSScotland patients to be tested</p> <p>Golden Jubilee National Hospital will raise funds from a variety of sources, including donations and EU-grants.</p> <ul style="list-style-type: none"> -will enable early roll-out of proposals -Fund will support new ways for people to record and monitor their own health through the use of new tech that puts people more in control of their own health. -Initial fund of £100K
Innovation Partnership Board (IPB) (Oversees The Innovation fund)	Role is to ensure a quick and widespread take up of innovations that make a big difference across Scotland. Will also fund NHS		

	boards to enable them to support their staff to bring ideas forward.		
Scottish Health Innovations Ltd SHIL	Scottish Health Innovations Ltd (SHIL) works in partnership with NHS Scotland to identify, protect, develop and commercialise new ideas and innovations from healthcare professionals.	Funds innovations developed specifically by health care professionals.	-est 2002 by NHS Scotland and Scottish Enterprise to support NHS innovation www.shil.co.uk SHIL services include: <ul style="list-style-type: none"> • project management; • market research; • sourcing funding; • Intellectual property protection; • sourcing of development partners; • spinout set up; and • regulatory consultancy.
Health innovation procurement portal	Online platform designed as a single-point resource to develop stronger	Provides potential suppliers with information, guidance and support on how to develop ideas and innovations into products	www.hipp-scotland.org launched 2014

	partnership with industry.	and technologies that may be of use to NHSScotland, or to further develop established products.	
Scottish Health Technologies group (SHTG) Innovative Medical Technology Overview (IMTO)	The purpose of the IMTO process is to provide manufacturers/ sponsors of non-medicine technologies the opportunity to submit primary clinical and cost effective evidence for independent assessment within NHSScotland, with	http://www.healthcareimprovementscotland.org/our_work/technologies_and_medicines/shtg.aspx	

	a view to improving the opportunity for the adoption of their technology across the NHS.		
NHS Innovations champions Network	Represents all NHS boards, est 2013,	Works to establish a wider innovation Cluster for Health and Social Care innovation in Scotland.	In line with the Scottish Government's 'Can Do' Economic policy, the Cluster unites all of Scotland's Health and Social Care providers and stakeholders into one network with the dual purpose of stimulating economic growth and transforming health and care. The Cluster is also aligned to Scottish Enterprises Open Innovation Hub and Highland's and Island's Enterprises Health Accelerator providing cross sector opportunities for innovation.
Innovative healthcare delivery programme (IHDP) (within the FARR institute)	Seeks to fundamentally change the way data and analytics are used to drive improvement in health outcomes	Fosters new relationships between the NHS, industry and the academic and the third sector. Aims:	http://www.farrinstitute.org/partnerships/iudp IHDP is a collaborative programme embedded in the Farr Institute@ Scotland. The programme will bring leadership and focus to realise the vision of harnessing the power of informatics to link NHS

		<ul style="list-style-type: none"> • To harness the power of healthcare informatics to deliver value to patients, healthcare professionals and the NHS through collaboration with academia, industry and the third sector • To act as a 'translational hub' between informatics and the NHS, Government, patients and citizens in Scotland • To describe and demonstrate the benefits of achieving 	<p>Scotland's rich data assets and deliver value rapidly to patients, healthcare professionals and the wider NHS.</p> <p>While the programme's initial focus is to design, develop and implement a cancer intelligence framework for Scotland, it has a clear remit to apply proven methodology to other clinical areas.</p>
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		<p>a Nationwide Learning Health System</p> <ul style="list-style-type: none"> • As a first priority and to inform how we approach other clinical areas in future: To develop a national cancer data framework for Scotland, linking primary, secondary, and ultimately social care data to improve patient outcomes. 	
Health Information Assessment Portal (part of HIP?)	an online platform that acts as a single-point resource to develop partnerships with industry	HIAP is an online platform that acts as a single-point resource to develop partnerships with industry, it provides potential suppliers	<p>https://www.hiap-scotland.org/</p> <p>HIAP collates and shares ideas. Potential to collaborate on digital elements.</p>

		information, guidance and support to develop innovative ideas into products and technologies that could be of use to NHS Scotland. The portal allows for NHS Scotland to assess how innovations can support its strategic aims, and what the associated benefits and costs are related to it.	
Healthcare Improvement Scotland (HIS)	We are the national healthcare improvement organisation for Scotland and part of NHSScotland. We work with staff who provide care in	<p>Our work drives improvements in the quality of healthcare people receive by:</p> <ul style="list-style-type: none"> • supporting and empowering people to have an informed voice in 	http://www.healthcareimprovementscotland.org/about_us.aspx

	hospitals, GP practices, clinics, NHS boards and with patients, carers, communities and the public.	<p>managing their own care and shaping how services are designed and delivered</p> <ul style="list-style-type: none"> • delivering scrutiny activity which is fair but challenging and leads to improvements for patients • providing quality improvement support to healthcare providers, and • providing clinical standards, guidelines and advice based upon 	
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		the best available evidence.	
Scottish Care	Website section in response to needing to share, promote and evidence the outcomes of the innovative care and support delivered by the sector	<p>This section aims to</p> <ul style="list-style-type: none"> • Share innovation • Evidence informed practice • Share knowledge and learning from tests of change • Be an improvement resource for services and individuals • Promote the positives outcomes for those in receipt of services from Independent sector 	http://www.scottishcare.org/innovation/

		<p>providers of health and social care</p> <ul style="list-style-type: none"> • Highlight the wide range of models of care currently provided both nationally and internationally • Be a resource for those exploring the development of new services • Signpost to external Improvement and Support agencies • Provide the opportunity to showcase innovation in practice. 	
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		This section is aimed primarily for providers of health and social care though contributions from partner organisations and individuals are welcome. It is very much “work in progress” so please get in contact if you have any comments or suggestions for the content.	
Scottish Digital health and care innovation	Is this still active?		http://dhcinnovate.co.uk/about-us/meet-team/
Highlands and Islands Enterprise			http://www.invernesscampus.co.uk/media/5166/DigitalHealthcare-A4_Jan-2014.pdf
Digital health institute - Glasgow			http://www.gcu.ac.uk/media/gcalwebv2/business/Digital%20Health%20Insitute.pdf

Caledonian University			
Remote and Rural healthcare network			http://www.gov.scot/Topics/Health/Services/Rural-Healthcare
Chief Scientist Office	<p>Innovation through research report – not an initiative but strategy for delivering vision 2020</p> <p>-NEED TO LOOK IN CONJUNCTION OF NRS – NHS RESEARCH STRATEGY FOR SCOTLAND</p> <p>-NRS – 4 REGIONAL NODES</p> <p>-WHAT ARE THE NRS RESEARCH</p>	<p>-four key areas:</p> <ol style="list-style-type: none"> 1. Efficient R&D Support for Research 2. Partnership with Scottish Patients and the Public 3. Targeted Deployment of Resources 4. Investing in the Future. <p>- The Scottish Health Informatics Programme (SHIP)</p> <p>• e-Health Informatics Research Centre (e-HIRC)</p> <p>•</p>	<p>http://www.gov.scot/Resource/0048/00488082.pdf</p> <p>Looking forward in this context, we have identified six guiding principles that we believe will help maintain Scotland's position at the forefront of health research internationally:</p> <ol style="list-style-type: none"> 1. Build on the strong science infrastructure that exists across our Universities in Scotland; 2. Deliver collaborative partnerships with a tripartite mission of research, education and delivery of quality health care and public health improvement; 3. Exploit our ability to link information from health, social care and non-health sources using data to support better treatment, safety and research;

	<p>NETWORKS? E.G.</p> <p>THE SCOTTISH</p> <p>DIABETES</p> <p>RESEARCH</p> <p>NETWORK (SDRN)</p>	<p>The Farr Institute</p> <p>Health Informatics</p> <p>Research Advisory Group (HIRAG)</p> <p><-could be collaborators?</p>	<p>4. De-clutter the pathway for the regulation and governance of health research by taking a proportionate and streamlined approach to research governance;</p> <p>5. Deliver collaborative arrangements with the biotechnology, pharmaceutical, informatics and medical devices industries;</p> <p>6. Position Scotland as a single research site when it makes good sense to do so</p> <p>- Action</p> <p>33.</p> <p>CSO will work with the SFC, Industry and the Innovation Centres – particularly the SMS IC and Digital Health Institute – with a view to ensuring that relevant outputs from these initiatives are suitably evaluated through research to warrant their adoption in the NHS. Is this our centre? -> CSO – collaborator or a competitor?</p>
<p>Scottish Health Research Register</p>	<p>Data base of citizens willing to participate in health research</p>		<p>Through electronic linkage of health information, SHARE will be able to identify potential recruits for studies far more efficiently than at present. Initially funded through a</p>

			<p>CSO small grant, SHARE has now been brought within the NRS Infrastructure budget to ensure sustainability and facilitate larger scale recruitment. In October 2015 there were over 80,000 people on SHARE but the long-term goal is to create a far larger register for use in relevant studies.</p> <p>-This register needs to be updated for including patients willing to participate in clinical trials.</p>
<p>SISCC Scottish Improvement Science Collaborating Centre</p>			<p>Co-funded in collaboration with NHS Education Scotland, the Scottish Funding Council and the Health Foundation, it is a national resource and centre of expertise in improvement science research, development and knowledge translation</p> <p>- Quality Improvement is now a unifying theme of NHSScotland and increasingly across public service. While to date NHSScotland has used its expertise to drive changes forward and there has been limited research to develop new knowledge, or publication of our work in respected peer reviewed journals.</p>

			As a consequence there is considerable scope to expand the volume of research related to quality improvement science in the context of the Scottish healthcare system
Scottish Enterprise			https://www.scottish-enterprise.com/ How does Scottish Enterprise relate to DHI? Our supporter? What type of digital health innovations do they drive?
SIE – Scottish Institute for enterprise	Our website is designed as an online hub for students and educators collecting all the student-focused enterprise activity happening in Scotland. Students can find out about local and national competitions, discover enterprise events near them, contact a		http://www.sie.ac.uk/about-sie/ SIE is funded by the Scottish Funding Council and Scottish Enterprise to help students in Scotland develop enterprise skills, discover their entrepreneurial talent and start up their own ventures. Entrepreneurship is an exciting and empowering life skill which brings many benefits to the individual and society. We aim to increase the number of students in Scotland who consider entrepreneurship a real option during their studies and after graduation. We do this through complementing institutional enterprise activities with our own nationally focused activities, competitions

	business advisor, and explore resources such as case studies, useful tools for exploring ideas and hundreds of avenues of support.		and events, and ensuring there is as much help and support available from the wider community. Enterprise skills give students options after graduation, whether this means starting their own business or standing out to a potential employer.
Scottish Development International		Promotes Scottish innovation internationally	https://www.sdi.co.uk/knowledge-hub/articles/insight/scotland-is-your-solution-for-newborn-digital-health-monitoring
SBRI Scottish business research initiative	The Small Business Research Initiative (SBRI) is a well established process to connect public sector challenges with innovative ideas from industry, supporting		https://www.gov.uk/government/collections/sbri-the-small-business-research-initiative SBRI provides innovative solutions to challenges faced by the public sector, leading to better public services and improved efficiency and effectiveness. It generates new business opportunities for companies, provides small and medium-sized enterprises (SMEs) a route to market for their ideas and bridges the seed funding gap experienced by many early stage companies. It supports economic growth and enables the

	companies to generate economic growth and enabling improvement in achieving government objectives.		development of innovative products and services through the public procurement of research and development (R&D).
SSSC Scottish social services Council			WHAT IS THIS FOR? COULD THIS BE A COLLABORATOR?
ALZHEIMER SCOTLAND	<p>Alzheimer Scotland is the leading dementia organisation in Scotland.</p> <p>We campaign for the rights of people with dementia and their families and provide an extensive range of innovative and</p>		http://www.alzscot.org/

	personalised support services.		
VANGUARD INITIATIVE	Provides a platform for Scottish businesses to connect with European partners		
Joint improvement team SG			
Scottish Co-production network			
Scottish health and social care alliance			
Iriss -	Iriss is a charitable company that promotes positive outcomes for		https://www.iriss.org.uk/

	the people who use Scotland's social services, by enhancing the capacity and capability of the social services workforce, to access and make use of knowledge and research for service innovation and improvement.		
The Health Foundation	The Health Foundation is an independent charity committed to bringing about better health and health care for people in the UK.	Testing of innovations and spreading what works, building skills and knowledge, developing and sharing evidence base	http://www.health.org.uk/about-us Our aim is a healthier population, supported by high quality health care that can be equitably accessed. We learn what works to make people's lives healthier and improve the health care system. From giving grants to those working at the front line to

			<p>carrying out research and policy analysis, we shine a light on how to make successful change happen.</p> <p>We make links between the knowledge we gain from working with those delivering health and health care and our research and analysis. Our aspiration is to create a virtuous circle, using what we know works on the ground to inform effective policymaking and vice versa.</p> <p>We believe good health and health care are key to a flourishing society. Through sharing what we learn, collaborating with others and building people's skills and knowledge, we aim to make a difference and contribute to a healthier population.</p>
Penumbra	<p>Penumbra is one of Scotland's largest mental health charities. We support around 1000 adults and young people every week and</p>		<p>http://www.penumbra.org.uk/about/</p> <p>Founded in 1985, we work to promote mental health and wellbeing for all, prevent mental ill health for people who are 'at risk', and to support people with mental health problems.</p> <p>We provide a wide range of services which offer hope and practical steps towards recovery, and we campaign to increase</p>

	employ 400 staff across Scotland.		public knowledge about mental health and to influence national and local government policy.
Scottish care	<p>Scottish Care is a membership organisation and the representative body for independent social care services in Scotland.</p> <p>Scottish Care represents over 400 organisations, which totals almost 900 individual services, delivering residential care, nursing care, day care, care at home and housing support services.</p>		<p>http://www.scottishcare.org/about-us/</p> <p>Our membership covers both private and voluntary sector provider organisations. It includes organisations of varying types and sizes, amongst them single providers, small and medium sized groups, national providers and not-for-profit voluntary organisations and associations.</p> <p>Our members deliver a wide range of registered services for older people and those with long term conditions, learning disabilities, physical disabilities, dementia or mental health problems.</p> <p>The Scottish independent social care sector contributes to:</p> <ul style="list-style-type: none"> • The employment of nearly 100,000 people • The employment of over 5,000 nurses • The provision of 83% of care home places in Scotland • The delivery of 55% of home care hours for older people

NES	NHS Education for Scotland are a special health board responsible for supporting NHS services in Scotland by developing and delivering education and training for those who work in NHSScotland.	Potential partner/desirable for collaboration	<p>Their vision is to use quality education for a healthier Scotland. NES has a Scotland wide role in undergraduate, postgraduate and continuing professional development and maintains a local perspective through centres in Edinburgh, Glasgow, Dundee, Aberdeen and Inverness. NES also cooperates and collaborates with regulatory bodies and other organisations that are concerned with the development of the health and care workforce for example the General Medical Council, universities and other professional bodies.</p> <p>NES are leading transformational change for health and social care, with a focus towards decision support.</p> <p>At NHSScotland Event 2016, NES exhibition stands showcased a number of projects and priorities for supporting the health and care workforce:</p> <ul style="list-style-type: none"> • The toolkit of safety and improvement educational resources for delivering safe, effective and person-centred care: http://ow.ly/V9B9U
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			<ul style="list-style-type: none"> • Information on our digital transformation programme and the person-centred model of putting people at the core of our digital services. • The NHS careers website, which provides information on a range of careers available within the NHS: http://www.careers.nhs.scot/ • The Quality Improvement workforce development tool, which is designed to help people and teams assess levels of quality improvement skills and confidence: http://www.qiwfdevtool.nes.scot.nhs.uk/ • The e-Learning modules for feedback and complaints: http://www.knowledge.scot.nhs.uk/making-a-difference.aspx <p>Christopher Wroath, Director of Digital Transformation at NES has been shortlisted for Holyrood Connect Digital Leader Award 2016. (http://www.nes.scot.nhs.uk/newsroom/features-and-articles/nes-leads-in-digital-innovation.aspx)</p>
CIVtech	CIVtech is a pilot being run by the Scottish Government		<p>Civtech have a number of challenges for people applying to them, these challenges are:</p> <ol style="list-style-type: none"> 1. <u>How can we help improve air quality in urban areas?</u>

	digital directorate, with a mission to harness digital innovation to create products to benefit public services.		<ol style="list-style-type: none"> 2. <u>How can we make our flood forecasting information better used by a wider audience?</u> 3. <u>How can we get health and social care data and analysis to the widest possible audience?</u> 4. <u>How can we make our data publications more accessible and appealing?</u> 5. <u>How can we promote the tourist destinations along the A9?</u> 6. <u>How can we use technology to design smart roads?</u> <p>Entrepreneurs keep 100% of their IP and equity.</p> <p>The pilot has a number of stages:</p> <ul style="list-style-type: none"> • Stage One: Challenge creation: Challenge Sponsors (Public Sector Organisations) identify the Challenge they have, define it and provide all relevant data, information and market opportunity on the Challenge, and ask for solutions [they do not define the solution]. • Stage Two: Application: The digital ecosystem responds with potential solutions: these could come from new start-ups, scale-ups, students, and citizens from any part of life.
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			<ul style="list-style-type: none"> • Stage Three: the Exploration Stage: Three teams are selected to work with the Challenge Sponsor for two weeks to refine their proposed solution. • Stage Four: the CivTech® Accelerator: One of the three are then selected to develop their product in collaboration with their Challenge Sponsor, and with citizen participation in a 3 month product development cycle. • Stage Five: Pre-Commercial development: At the end of Accelerator period, the Challenge Sponsor would have the opportunity and be encouraged to continue the contract with the participant team. • Stage Six: National and international commercialisation: the product is now commercialised and looking to build a national and international client base. <p>All details from: https://civtech.atlassian.net/wiki/pages/viewpage.action?pageId=655364 </p>
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Public Sector Innovation Challenge (PSIC)	<p>The proposed Public Sector Innovation Challenge (PSIC) fund and support programme has been designed in response to the best practice, and recommended improvements, from leading national approaches to innovation procurement, and its implementation will enable Scotland to realise an even greater economic benefit from this integrated</p>		<p>Key elements:</p> <ul style="list-style-type: none"> • A national coordinating service to raise public awareness within public agencies of the benefits of innovation procurement and support the identification of suitable innovation challenges. • Financial incentives for public agencies to address innovation challenges through innovation procurement – where there is potential for service improvement and economic impact. • A service to ensure early and effective engagement with the Scottish SME base. This service will be integrated with existing wider business support and networking infrastructure. • A service to ensure support for solver businesses to fully commercialise their new product or service. This resource will integrate with and add value to the existing innovation and business support infrastructure. • Support for ‘solver’ companies is a 100% funded R&D contract which supports the product/service development
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	<p>approach to innovation support and public sector service improvement</p>		<p>all the way to a field trial/reference site with a real customer and SMEs retain the exploitation rights on IP.</p> <p>The 4 year, £21mn, PSIC fund is being developed through the Scottish Government's independent gateway review process. This new national programme is being developed in a collaborative and co-ordinated manner with Scottish Government, its Development Agencies and the Scottish Funding Council. This co-ordination is already evident as the development team are currently working with the SG's "Civtech" team to identify and co-fund suitable public sector innovation challenges to support Civtech to pilot and test their digital services business accelerator model. The ambition is to launch the Fund early in 2017 and in the meantime to continue to develop and support innovation challenges emerging from the public sector using the pre-commercial procurement model.</p> <p>http://www.gov.scot/Resource/0050/00503649.pdf</p>
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